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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,540	10/29/2003	Chet R. Douglas	42P17156	7574

8791 7590 12/04/2006

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EXAMINER

HASSAN, AURANGZEB

ART UNIT PAPER NUMBER

2182

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/697,540

Applicant(s)

DOUGLAS ET AL.

Examiner

Aurangzeb Hassan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7,9,10,17,18,22,23 and 25-29 is/are rejected.
- 7) ☒ Claim(s) 3-5,8,11-16,19-21 and 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. In view of the Appeal Brief filed on 9/14/2006, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claims 1, 6, 7, 9, 17, 22, 23 and 25 – 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Hare et al. (US Patent Number 6,484,173, hereinafter "OHare") in view of Allen et al. (US Patent Number 6,895,453, hereinafter "Allen").

4. As per claims 1, 9, 17, 25, OHare teaches a method, apparatus, article and system comprising:

retrieving a first identifier (ID) (individual ID, column 15, lines 10 – 13) from a table (ID's are stored in tables, column 13, lines 44 – 53);

retrieving a second ID from the table (host system ID, column 15, lines 13 – 16);  
and

generating a virtual ID (unique ID, column 15, lines 13 – 17) by randomizing the first ID and the second ID (ID's are combined to form the unique ID and randomized via a secured hash program, column 15, lines 13 – 22).

OHare does not explicitly disclose ID's are vendor ID's.

Allen teaches a first vendor identifier (element 275, figure 2) and a second vendor identifier (element 280, figure 2) from a table (vendor identifiers stored as a table, column 11, lines 5 – 9).

Both Allen and OHare are in a Fibre Channel data storage device environment and it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify OHare with the above teachings of Allen. One of ordinary skill in the art would be motivated to make such modification in order to uniquely identify devices connected with Fibre Channel (column 6, lines 10 – 15).

5. As per claims 6 and 22, Allen teaches a method, apparatus and article comprising:

extracting the first vendor ID from a world wide name (element 225, figure 2)  
identifying a first device (column 8, lines 31 – 35); and  
extracting the second vendor ID from a world wide name (element 255 of figure 2) identifying a second device (column 5, lines 55 – 58).

6. As per claims 7 and 23, Allen teaches a method, apparatus and article wherein: the first device and the second device comprise physical devices (elements 275 and 280, figure 2, column 9, lines 1 – 2).

7. As per claim 26, Allen teaches a system wherein the circuit board also comprises a processor coupled to a bus; and the circuit card slot is also coupled to the bus (column 8, lines 29 – 31).

8. As per claim 27, Allen teaches a system wherein the first vendor ID corresponds to a first redundant array of inexpensive disk (RAID) and the second vendor ID corresponds to a second RAID (column 4, lines 55 – 65).

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9. As per claim 28, Allen teaches a system wherein the circuit card is coupled (Fibre Channel Interconnect) to the first RAID and the second RAID (many RAID devices, lines 4, lines 43 – 60).

10. As per claim 29, Allen teaches a system wherein the circuit card is coupled (Fibre Channel Interconnect) to the first RAID and the second RAID (many RAID devices, lines 4, lines 43 – 60) via a network (on the network, column 5, lines 24 – 26).

11. Claims 2, 10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over OHare in view of Allen further in view of "Hashing Revisited" ("Hashing Revisited, Myths exposed, a new order revealed, John Hamer, hereinafter "Hamer").

12. As per claims 2, 10, 18, OHare teaches a method, apparatus and article wherein the process of generating the virtual ID (randomizing via secure hash function column 15, lines 17 – 22).

OHare discloses randomizing via secure hash function (as seen in claim 1 rejection) however does not disclose the specific components involved in the process.

Hamer teaches the essential components of a hash function comprising:

rotating the first vendor ID and the second vendor ID (OHare's virtual ID is first a combination of a first and second ID then randomized as shown in the claim 1 rejection above) by a predetermined amount to form a rotated ID (rotating xor, page 9) ; and

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performing a logical exclusive-or of the other rotated ID with a predetermined number (rotating xor, page 9).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement the detailed hash function of Hamer in OHare in order to provide an efficiency in identification generation as taught by Hamer (page 20).

### ***Allowable Subject Matter***

13. Claims 3 – 5, 8, 11 – 16, 19 – 21 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to teach or suggest alone or in combination the limitations of randomizing a counter by rotating the counter value and performing a logical exclusive-or with a virtual ID and prior art is further silent on retrieving a third vendor ID from a table, rotating the third vendor to form a second rotated ID and performing a logical exclusive-or of a second rotated ID with a virtual ID, in combination with the elements found in the claims from which claims 3 – 5, 8, 11 – 16, 19 – 21 and 24 depend. Prior art is further silent on motivation to combine such features and functionality and is therefore deemed allowable.

### ***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aurangzeb Hassan whose telephone number is (571)272-8625. The examiner can normally be reached on Monday - Friday 9 AM to 5:30 PM.

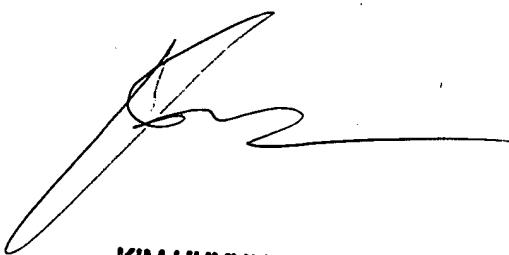
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571)272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AH



**KIM HUYNH**  
**SUPERVISORY PATENT EXAMINER**  
11/27/06